RAW SEQUENCE LISTING

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Application Serial Number: _10/019 282_
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RAW SEQUENCE LISTING   DATE: 10/19/2004
PATENT APPLICATION: US/10/019,282   TIME: 17:29:38

Input Set : D:\217770US0PCT.txt
Output Set: N:\CRF4\10192004\J019282.raw

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 3 <110> APPLICANT: SHIBATA, TAKASHI
 4        NOGUCHI, YUJI
 5        YAMASHITA, MICHIO
 7 <120> TITLE OF INVENTION: GENE ENCODING CYCLIC LIPOPEPTIDE ACYLASE AND EXPRESSION OF
THE
 8        SAME
10 <130> FILE REFERENCE: 217770US0PCT
12 <140> CURRENT APPLICATION NUMBER: 10/019,282
13 <141> CURRENT FILING DATE: 2002-01-02
15 <150> PRIOR APPLICATION NUMBER: PCT/JP00/04285
16 <151> PRIOR FILING DATE: 2000-06-28
18 <150> PRIOR APPLICATION NUMBER: JP189644/1999
19 <151> PRIOR FILING DATE: 1999-07-02
21 <160> NUMBER OF SEQ ID NOS: 76
23 <170> SOFTWARE: PatentIn version 3.2
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26 <211> LENGTH: 5692
27 <212> TYPE: DNA
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33 <222> LOCATION: (948)..(3362)
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64 ccagacggtt gacagcttcc cgggctccct ggctgagtga cgcttggccg tccgggcgtt  900
66 ccggaccggc cgcgcccgtg ccacccgtac cgctgggagg aaacacc ttg acg tta   956
67                                                     Leu Thr Leu
68                                                     1
70 cgc aac cgt ctg aga ctg ctc ggg gtc gcc ggt ctc gcc ctg ttc acc  1004
71 Arg Asn Arg Leu Arg Leu Leu Gly Val Ala Gly Leu Ala Leu Phe Thr
72     5                  10                  15
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75 Val Ser Ala Ser Leu Pro Pro Ala Thr Ala Ser Gly Thr Gln Glu Thr
76 20              25                  30                  35
78 cgg cac ccg tcc ggg agc ggt ctt tcg gcc gtc atc cgg tac acg gag      1100
79 Arg His Pro Ser Gly Ser Gly Leu Ser Ala Val Ile Arg Tyr Thr Glu
80              40                  45                  50
82 tac ggc att ccg cac atc gtg gcg gag gac tac gcg cag ttg ggc ttc      1148
83 Tyr Gly Ile Pro His Ile Val Ala Glu Asp Tyr Ala Gln Leu Gly Phe
84              55                  60                  65
86 ggc acc ggc tgg gcg cag gcc gcc gat cag gtg tgc acg ctg gcg gac      1196
87 Gly Thr Gly Trp Ala Gln Ala Ala Asp Gln Val Cys Thr Leu Ala Asp
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90 ggc ttc ctc acg gtg cgc ggg gag cgg tcg agg ttc ttc ggc ccg gac      1244
91 Gly Phe Leu Thr Val Arg Gly Glu Arg Ser Arg Phe Phe Gly Pro Asp
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94 gcc gcc acg gac tac tcc ctc tcc tcg gcg gcg acg aac ctc tcc agc      1292
95 Ala Ala Thr Asp Tyr Ser Leu Ser Ser Ala Ala Thr Asn Leu Ser Ser
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98 gac ctg tac ttc cgg ggc gtc cgc gac agc ggc acg gtg gag aag ctg      1340
99 Asp Leu Tyr Phe Arg Gly Val Arg Asp Ser Gly Thr Val Glu Lys Leu
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102 ctc aag gag ccc gcg ccc gcc ggt ccg agc agg gac gtc aag gag acg     1388
103 Leu Lys Glu Pro Ala Pro Ala Gly Pro Ser Arg Asp Val Lys Glu Thr
104             135                 140                 145
106 atg cgc ggg ttc gcc gcc ggg tac aac gcg tgg atc gcg cag aac cgg     1436
107 Met Arg Gly Phe Ala Ala Gly Tyr Asn Ala Trp Ile Ala Gln Asn Arg
108         150                 155                 160
110 atc acc gac ccc gcc tgc cgg ggc gcg tcc tgg gtg cgc ccg gtg acg     1484
111 Ile Thr Asp Pro Ala Cys Arg Gly Ala Ser Trp Val Arg Pro Val Thr
112     165                 170                 175
114 gcg ctg gac gtg gcg gcg cgc ggc tac gcg ctg gcg gtg ctc ggc ggc     1532
115 Ala Leu Asp Val Ala Ala Arg Gly Tyr Ala Leu Ala Val Leu Gly Gly
116 180                 185                 190                 195
118 cag ggg cgc ggc atc gac ggc atc acc gcg gca cag ccg ccg acc gcc     1580
119 Gln Gly Arg Gly Ile Asp Gly Ile Thr Ala Ala Gln Pro Pro Thr Ala
120                 200                 205                 210
122 gct cct ccg gcg gcc ggg gtc acg ccc gag gag gcg gcg acg gcg gcg     1628
123 Ala Pro Pro Ala Ala Gly Val Thr Pro Glu Glu Ala Ala Thr Ala Ala
124             215                 220                 225
126 gag cgg ctg ctg tcg acg cag aac gcg gac atg ggt tcc aac gcg gtg     1676
127 Glu Arg Leu Leu Ser Thr Gln Asn Ala Asp Met Gly Ser Asn Ala Val
128         230                 235                 240
130 gcc ttc gac ggc tcc acg acg gtg aac ggg cgc ggg ctg ttg ctc ggc     1724
131 Ala Phe Asp Gly Ser Thr Thr Val Asn Gly Arg Gly Leu Leu Leu Gly
132     245                 250                 255
134 aac ccg cac tac ccg tgg cag ggc gga cgc cgc ttc tgg cag gcg cag     1772
135 Asn Pro His Tyr Pro Trp Gln Gly Gly Arg Arg Phe Trp Gln Ala Gln
136 260                 265                 270                 275
138 cag acg atc ccc ggc gag ctg aac gtg tcg ggc gcg tcc ctg ctg ggc     1820
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143 Ala Thr Thr Ile Ser Ile Gly His Asn Ala Asp Val Ala Trp Ser His
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146 acg gtc gcc acg ggc gtc acg ctg aat ctg cat cag ctc agc ctc gat   1916
147 Thr Val Ala Thr Gly Val Thr Leu Asn Leu His Gln Leu Ser Leu Asp
148             310             315             320
150 ccg gcc gac ccg acc gtc tat ctg gtg gac ggg aag cgg gag cgg atg   1964
151 Pro Ala Asp Pro Thr Val Tyr Leu Val Asp Gly Lys Arg Glu Arg Met
152     325             330             335
154 acg cag cgg acg gtg agc gtc ccg gtg aag ggc ggg gcc gac gtg acc   2012
155 Thr Gln Arg Thr Val Ser Val Pro Val Lys Gly Gly Ala Asp Val Thr
156 340             345             350             355
158 cgc acc cag tgg tgg acc cgc tac ggg ccg gtg gcc acc tcg atg ggc   2060
159 Arg Thr Gln Trp Trp Thr Arg Tyr Gly Pro Val Ala Thr Ser Met Gly
160             360             365             370
162 gcg ggg ctg ccg ttg ccg tgg acg gcg agc acg gcg tac gcg ctg aac   2108
163 Ala Gly Leu Pro Leu Pro Trp Thr Ala Ser Thr Ala Tyr Ala Leu Asn
164             375             380             385
166 gat ccg aac gcg acg aat ctg cgg atg gcg gac acc ggt ctg ggc ttc   2156
167 Asp Pro Asn Ala Thr Asn Leu Arg Met Ala Asp Thr Gly Leu Gly Phe
168             390             395             400
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171 Gly Lys Ala Arg Ser Thr Gly Asp Val Glu Arg Ala Leu His Arg Ser
172     405             410             415
174 cag ggc atg ccg tgg gtg aac acg atc gcg gcg gac cgg gcg ggt cgc   2252
175 Gln Gly Met Pro Trp Val Asn Thr Ile Ala Ala Asp Arg Ala Gly Arg
176 420             425             430             435
178 tcg ttc ttc gcg cag tcg cag gtg ctg ccg agg atc acc gac gcg ttg   2300
179 Ser Phe Phe Ala Gln Ser Gln Val Leu Pro Arg Ile Thr Asp Ala Leu
180             440             445             450
182 gcg gag cgc tgc tcg acc ccg ctg ggc cgg gcc acc tac ccc gct tcc   2348
183 Ala Glu Arg Cys Ser Thr Pro Leu Gly Arg Ala Thr Tyr Pro Ala Ser
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186 ggc ctc gcg gtg ctg gac ggt tcg cgg acg gac tgc gcg ctg ggc agc   2396
187 Gly Leu Ala Val Leu Asp Gly Ser Arg Thr Asp Cys Ala Leu Gly Ser
188             470             475             480
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191 Asp Pro Asp Ala Val Arg Pro Gly Ile Phe Gly Pro Gly Arg Met Pro
192     485             490             495
194 gtg ctg aag aac cag ccg tac gtg gag aac tcc aac gac agc gcg tgg   2492
195 Val Leu Lys Asn Gln Pro Tyr Val Glu Asn Ser Asn Asp Ser Ala Trp
196 500             505             510             515
198 ctg acc aat gcg gag cgg ccg ctg acc ggg tac gag cgg gtc ttc ggc   2540
199 Leu Thr Asn Ala Glu Arg Pro Leu Thr Gly Tyr Glu Arg Val Phe Gly
200             520             525             530
202 acg atc gcg acg ccc cgg tcg atg cgg acg cgc ggc gcg atc gag gac   2588
203 Thr Ile Ala Thr Pro Arg Ser Met Arg Thr Arg Gly Ala Ile Glu Asp
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208          550              555              560
210 cgg cag cag ttc gcc aac cgt gcg ccg gcc ggg gat ctg gcc gcc tcc        2684
211 Arg Gln Gln Phe Ala Asn Arg Ala Pro Ala Gly Asp Leu Ala Ala Ser
212      565              570              575
214 gag gcc gcc aag tgg tgt gcg gcg ctg ccg ggc ggc acg gcc gtg ggc        2732
215 Glu Ala Ala Lys Trp Cys Ala Ala Leu Pro Gly Gly Thr Ala Val Gly
216 580              585              590              595
218 tcc gac gga acg ccg gtc gac gtg tcg gcg gcc tgc cgg gtg ctg cgg        2780
219 Ser Asp Gly Thr Pro Val Asp Val Ser Ala Ala Cys Arg Val Leu Arg
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222 cgc tgg gac cgg acc gtg gac agc gac agc cgg ggc gcg ctg ctc ttc        2828
223 Arg Trp Asp Arg Thr Val Asp Ser Asp Ser Arg Gly Ala Leu Leu Phe
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227 Asp Arg Phe Trp Arg Lys Ala Ser Ser Ala Pro Ala Ala Glu Leu Trp
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234 aac acg gcc gcg ccc gtc ctg ggc agg gcc ctg gcg gac gcc gtg gcg        2972
235 Asn Thr Ala Ala Pro Val Leu Gly Arg Ala Leu Ala Asp Ala Val Ala
236 660              665              670              675
238 gag ctg cgg gcg gcg ggc atc gcg ctg gac gcc ccg ctg ggc gag cac        3020
239 Glu Leu Arg Ala Ala Gly Ile Ala Leu Asp Ala Pro Leu Gly Glu His
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244              695              700              705
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248          710              715              720
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251 Gly Gly Gly Tyr Thr Glu Val Ser Ser Gly Ser Ser Tyr Ile Gln Ala
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254 gtc ggc tgg gac gac agc cgc tgc ccg gtg gcc cgg acg ctg ctg acg        3212
255 Val Gly Trp Asp Asp Ser Arg Cys Pro Val Ala Arg Thr Leu Leu Thr
256 740              745              750              755
258 tac tcc cag tcg gag aac ccg aag tca ccg cac tac agc gac cag acc        3260
259 Tyr Ser Gln Ser Glu Asn Pro Lys Ser Pro His Tyr Ser Asp Gln Thr
260              760              765              770
262 agg ctg tac gcg ggt gag cgc tgg gtg acg tcc cgg ttc tgc gag agg        3308
263 Arg Leu Tyr Ala Gly Glu Arg Trp Val Thr Ser Arg Phe Cys Glu Arg
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266 gac atc gcg cgt tcg ccg gac ctg cgg gtg gtg cgg gtg cac gag cgg        3356
267 Asp Ile Ala Arg Ser Pro Asp Leu Arg Val Val Arg Val His Glu Arg
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353 <212> TYPE: PRT
354 <213> ORGANISM: Streptomyces Sp.
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